

IT IS CLAIMED:

1. An isolated nucleic acid regulatory sequence for a cyclin D1 promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to a cyclin D1 promoter containing said regulatory sequence.

SUB 12 2. The regulatory promoter sequence of claim 1, wherein said sequence is selected from the group consisting of SEQ ID NO.:5, SEQ ID NO.:6 and SEQ ID NO.:8.

10 3. An isolated nucleic acid regulatory sequence for a CD40L promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to a CD40L promoter containing said regulatory sequence.

15 4. The regulatory promoter sequence of claim 3, wherein said sequence is selected from the group consisting of SEQ ID NO.:12, SEQ ID NO.:13, SEQ ID NO.:14 and SEQ ID NO.:15.

20 5. An isolated nucleic acid regulatory sequence for an HBV promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to an HBV promoter containing said regulatory sequence.

6. The regulatory promoter sequence of claim 5 wherein said HBV promoter is a core, preS1 or X promoter.

25 7. The regulatory promoter sequence of claim 6 wherein said sequence is the HBV core promoter sequence presented as SEQ ID NO.:20 or SEQ ID NO.:21.

8. The regulatory promoter sequence of claim 6 wherein said sequence is the HBV preS1 promoter sequence presented as SEQ ID NO.:23 or SEQ ID NO.:24.

30 9. The regulatory promoter sequence of claim 6 wherein said sequence is an HBV X promoter sequence selected from the group consisting of SEQ ID NO.:26, SEQ ID NO.:27 and SEQ ID NO.:28.

10. An isolated nucleic acid regulatory sequence for a vancomycin-resistant enterococci (VRE) promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to a VRE promoter containing said regulatory sequence.

11. The regulatory promoter sequence of claim 10 wherein said sequence is selected from the group consisting of SEQ ID NO.:32, SEQ ID NO.:33 and SEQ ID NO.:34.

12. An isolated nucleic acid regulatory sequence for an androgen receptor (AR) promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to an AR promoter containing said regulatory sequence.

13. The regulatory promoter sequence of claim 12, wherein said sequence is selected from the group consisting of SEQ ID NO.:64, SEQ ID NO.:65 and SEQ ID NO.:66.

14. An isolated nucleic acid regulatory sequence for a HER2 promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to a HER2 promoter containing said regulatory sequence.

15. The regulatory promoter sequence of claim 14, wherein said sequence is selected from the group consisting of SEQ ID NO.:70, SEQ ID NO.:71 and SEQ ID NO.:72.

16. An isolated nucleic acid regulatory sequence for a beta lactamase (Bla) promoter, said regulatory sequence characterized by the ability to regulate expression of a gene operably linked to a Bla promoter containing said regulatory sequence.

17. The regulatory promoter sequence of claim 16 wherein said sequence is the Bla promoter sequence presented as SEQ ID NO.77 or SEQ ID NO.78.

18. A vector comprising a promoter regulatory nucleic acid sequence of any one of claims 2, 4, 7, 8, 9, 11, 13, 15 and 17.

19. The vector of claim 18, wherein said vector is an expression vector comprising (i) said promoter regulatory nucleic acid sequence operably linked to a promoter and control sequences recognized by a host cell transformed with the vector; and (ii) a transgene encoding an autologous or heterologous gene product.

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20. The vector of claim 19, wherein said transgene is a reporter gene.

21. A host cell comprising the vector of claim 20.

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22. The host cell of claim 21, wherein said host cell is a prokaryotic cell.

23. The host cell of claim 21, wherein said host cell is a eukaryotic cell.

24. The host cell of claim 21, wherein said host cell is a mammalian cell.

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25. A method of regulating gene expression in a cell comprising

(i) introducing into a cell an expression vector according to claim 19, /

(ii) exposing said promoter regulatory sequence to a cellular factor or a DNA binding compound resulting in modulated expression of said transgene; and

(iii) detecting the expression thereof.

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